GOVERNMENT OF INDIA
SOCIAL JUSTICE AND EMPOWERMENT
LOK SABHA

UNSTARRED QUESTION NO:2720
ANSWERED ON:01.08.2017
Research in Prosthetic Limbs
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Will the Minister of SOCIAL JUSTICE AND EMPOWERMENT be pleased to state:

(a) the steps being taken by the Government for the research in prosthetic limbs;
(b) whether any advances in prosthetic technology have been made in the last ten years and if so, the details thereof;
(c) whether these advances have been adopted by people with disabilities in the country and if so, the details thereof; and
(d) the measures taken by the Government to import prosthetic technology from other countries?

Answer

MINISTER OF STATE FOR SOCIAL JUSTICE & EMPOWERMENT
(SHRI KRISHANPAL GURJAR)

(a) The Department implements a Central Sector Scheme on 'Research on Disability Related Technology, Products and Issues' to provide financial assistance in research in disability sector. So far no research in Prosthetic limbs has been funded under the scheme.

Further, under the aegis of this Department, three National Institutes, namely, Swami Vivekanand National Institute of Rehabilitation Training and Research (SVNIRTAR), Cuttack, National Institute for Locomotor Disabilities (NILD), Kolkata and Pt. Deendayal Upadhyaya National Institute for Persons with Physical Disabilities (PDUNIPPD), New Delhi, are the nodal Institutes for rehabilitation of the persons with orthopaedic disabilities. These Institutes undertake various projects/ R&D activities in prosthetic limbs.

(b) SVNIRTAR, Cuttack under the Science & Technology Mission Mode Research Project, has designed and developed the Modular/ Endoskeleton Below Knee Prosthesis Kit and Modular Above Knee Prosthesis. The Above Knee prosthesis are light in weight, require less time to fabricate, alongwith excellent knee stability and increased range of flexion.

NILD, Kolkata has developed following advancements in prosthetic technology:-

(i) Pediatric Prosthesis (ii) Quick Fabricated Prosthetic Socket (iii) Modular or Phylon immediate prosthesis (iv) Microprocessor Controlled Active Ankle Foot Prosthesis (v) Myo-electric Control based bio-feedback and training system for upper limb amputee.

(c) The technology of Modular Below & Above Knee Prosthesis of SVNIRTAR has been handed to the Public Sector Undertaking under this Department, Artificial Limbs Manufacturing Corporation of India (ALIMCO) for mass scale manufacture of prefabricated components.

NILD is using the Pediatric Prosthesis and two prosthetic components, namely, (i) Quick Fabricated Prosthetic Socket and (ii) Modular or Phylon Immediate Prosthesis for the persons with disabilities.

Also, ALIMCO has embraced advanced technology in the materials of the prosthetics in phased manner, changing the material from wood to Poly-propylene and metal for manufacturing of Lower Prosthetics. Presently, ALIMCO is mainly manufacturing metallic Lower Prosthetics.

(d) A Technology Transfer Agreement has been signed between ALIMCO & M/s Ottobock Healthcare India Private Limited for transfer of Know-How and Technical Data from M/s Ottobock for Manufacturing and Assembly of Lower Extremity Prosthetics (Above Knee [AK] & Below Knee [BK] kits).

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